

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A pharmaceutical composition for modulating at least one inflammatory response associated with human heparin binding protein (hHBP), said composition comprising an antibody against hHBP (SEQ ID NO: 1) or a fragment of said antibody, or an antibody against a homologue of hHBP or a fragment of said antibody, wherein the antibody (i) is capable of binding to an epitope within the sequence consisting of amino acid residues 1 to 19 or 45 to 226 according to SEQ ID NO: 1 and thereby stimulating at least one inflammatory response associated with hHBP, or (ii) is capable of binding to an epitope within the sequence consisting of amino acid residues 20 to 44 according to SEQ ID NO: 1 and thereby inhibiting at least one inflammatory response associated with hHBP.

2. (Original) The pharmaceutical composition according to claim 1, wherein the composition is for the stimulating at least one inflammatory response associated with human heparin binding protein (hHBP), said composition comprising an antibody against hHBP (SEQ ID NO: 1) or a fragment of said antibody, or an antibody against a homologue of hHBP or a fragment of said antibody, said antibody being capable of binding to an epitope within the sequence consisting of amino acid residues 1 to 19 or

45 to 226 according to SEQ ID NO: 1 and thereby stimulating at least one inflammatory response associated with hHBP.

3. (Original) The pharmaceutical composition according to claim 1, wherein the composition is for the inhibiting at least one inflammatory response associated with human heparin binding protein (hHBP), said composition comprising an antibody against hHBP (SEQ ID NO: 1) or a fragment of said antibody, or an antibody against a homologue of hHBP or a fragment of said antibody, said antibody being capable of binding to an epitope within the sequence comprising amino acid residues 20 to 44 according to SEQ ID NO: 1 and thereby inhibiting at least one inflammatory response associated with hHBP.

4. (Currently Amended) The pharmaceutical composition according to claim 1, ~~2 or 3~~, wherein the antibody is a monoclonal antibody.

5. (Currently Amended) The pharmaceutical composition according to claim 1 ~~or 2~~, wherein the antibody is produced by a cell of clone F19A5B1 (ECACC Ass. No.: 03090301)

6. (Currently Amended) The pharmaceutical composition according to claim 1 ~~or 3~~, wherein the antibody is produced by a cell of clone F19A5B4 (ECACC Ass. No.: 03090302).

7. (Currently Amended) The pharmaceutical composition according to claim 1, ~~2 or 3~~, wherein the antibody is a polyclonal antibody.

8. (Currently Amended) The pharmaceutical composition according to claim 1, ~~2 or 3~~, wherein the HBP homologue is porcine heparin binding protein (pHBP) (SEQ ID NO: 588).

9. (Currently Amended) The pharmaceutical composition according to claim 1, ~~2 or 3~~ wherein the HBP homologue is human neutrophil elastase (hNEL) (SEQ ID NO: 589).

10. (Currently Amended) The pharmaceutical composition according to claim 1, ~~2 or 3~~, wherein the modulating of at least one inflammatory response being

i) up- or down regulating the gene expression in the immune cells, preferably monocytes/macrophages, leading to secretion of endogenous inflammatory mediators including receptors for inflammatory mediators and transcription factors involved in the signal transduction of the inflammatory mediators, activation of the production of bradykinin by the phase contact system, and/or

ii) increasing or decreasing the blood concentration of monocytes and/or local accumulation thereof at the sites of inflammation, and/or

- iii) increasing or decreasing the life-time of monocytes, neutrophils and other immune cells due to inhibition of apoptosis, and/or
- iv) activating or inhibiting the expression of adhesion molecules by the vascular endothelial cells, and/or
- v) activating or inhibiting the contact phase system producing bradykinin leading to an increased vascular permeability, and/or
- vi) increasing the phagocytic potential of monocytes/macrophages, and/or
- vii) up-regulation of class-II MHC.

11. (Original) The pharmaceutical composition according to claim 10, wherein the immune cells are monocytes/macrophages.

12. (Currently Amended) The pharmaceutical composition according to claim 10, wherein the mediators are ~~selected from the group comprising~~ cytokines, selected from the group consisting of TNFalpha, IL-1, IL-6, G-CSF, GM-CSF, and M-CSF, chemokines selected from the group ~~comprising~~ consisting of IL-8[,] and MCP-1, and or receptors selected from the group ~~comprising~~ consisting of Tissue factor and IL-2Ralpha.

13. (Original) The pharmaceutical composition according to claim 10, wherein the adhesion molecules are

selected from the group comprising PECAM, ICAM-1, E-selectins and VCAM-1.

14. (Currently Amended) The pharmaceutical composition according to ~~any of the preceding claims 1, 2, 4, 5, 7, 8 or 9~~ claim 10, wherein the antibody is a pro-inflammatory antibody capable of stimulating the at least one such inflammatory response ~~as defined in claims 10-13~~ in the absence of bacterial products in the blood.

15. (Currently Amended) The pharmaceutical composition according to ~~any of the preceding claims 1, 2, 4, 5, 7, 8 or 9,~~ claim 10 wherein the antibody is a pro-inflammatory antibody capable of stimulating the at least one such inflammatory response ~~as defined in claims 10-13~~ in synergistic action with bacterial products present in the blood.

16. (Currently Amended) The pharmaceutical composition according to ~~any of the claims 10 to 14~~ claim 10, wherein the antibody is capable of stimulating the synthesis and/or release of cytokine IL-6.

17. (Cancelled)

18. (Currently Amended) The pharmaceutical composition according to ~~any of the preceding claims 1, 3, 4, 6, 7, 8 or 9,~~ claim 10, wherein the antibody is an anti-inflammatory antibody capable of inhibiting the at least one such inflammatory

response as defined in claims 10-13 in the absence of bacterial products in the blood.

19. (Currently Amended) The pharmaceutical composition according to ~~any of the preceding claims 1, 3, 4, 6, 7, 8 or 9, claim 10~~, wherein the antibody is an anti-inflammatory antibody capable of inhibiting the at least one such inflammatory response as defined in claims 10-13 in the presence of bacterial products in the blood.

20. (Cancelled)

21. (Currently Amended) The pharmaceutical composition according to ~~claims 14-20~~ claim 15, wherein the bacterial products are selected from the group consisting of LPS (Lipopolysaccharide), PGN (peptidoglycan), LTA (Lipotechoic acid), MDP (muramyldipeptide) and PCW (purified cell wall from bacteria).

22. (Currently Amended) The pharmaceutical composition according to ~~claims 1, 2 or 3, claim 10~~ wherein the antibody fragment is being capable of binding to

- (i) an epitope within the sequence consisting of amino acid residues 1 to 19 or 45 to 226 according to SEQ ID NO: 1 and thereby activating at least one such inflammatory response ~~according to claims 10-13~~, or
- (ii) an epitope within the sequence consisting of amino acid residues 20-44 according to SEQ ID NO: 1

and thereby inhibiting at least one such inflammatory response ~~according to claims 10-13.~~

2123. (Currently Amended) An hHPB binding pro-inflammatory monoclonal antibody having all of the identifying characteristics of the monoclonal antibody produced by clone F19A5B1 (ECACC Ass. No.: 03090301), or an antibody fragment which is an hHBP-binding fragment of said monoclonal antibody.

2224. (Currently Amended) An hHBP binding anti-inflammatory monoclonal antibody having all of the identifying characteristics of the monoclonal antibody produced by clone F19A5B4 (ECACC Ass. No.: 03090302), or an antibody fragment which is an hHBP-binding fragment of said monoclonal antibody.

2325. (Currently Amended) A cell producing the antibody according to claim 21.

2426. (Currently Amended 1) A cell producing the antibody according to claim 22.

2527. (Currently Amended) An antibody or fragment thereof, wherein said antibody or said fragment is capable of binding to an epitope in hHBP, wherein said epitope being an epitope as according to claim 1, ~~2 or 3.~~

2628. (Currently Amended) A recombinant protein comprising a the antibody fragment of the antibody of claim 21 23, said fragment being capable of binding to an epitope within

the sequence consisting of amino acid residues 1 to 19 or 45 to 226 according to SEQ ID NO: 1 and thereby activating at least one inflammatory response ~~as defined in claims 10-13.~~

2729. (Currently Amended) A recombinant protein comprising ~~a~~ the antibody fragment of the antibody of claim ~~21~~ 23, said fragment being capable of binding to an epitope within the sequence ~~consisting~~ of amino acid residues 20 to 44 according to SEQ ID NO: 1 and thereby inhibiting at least one inflammatory response ~~as defined in claims 10-13.~~

2830. (Cancelled)

2931. (Cancelled)

3032. (Cancelled)

3133. (Cancelled)

3234. (Cancelled)

3335. (Cancelled)

3436. (Cancelled)

3537. (Cancelled)

3638. (Cancelled)

3739. (Cancelled)

3840. (Cancelled)

3941. (Cancelled)

4042. (Cancelled)

4143. (Cancelled)

44. (New) A method of modulating the inflammatory response in a subject which comprises administering an inflammatory response-modulating amount of a composition according to claim 1.

45. (New) A method of stimulating the inflammatory response in a subject which comprises administering an inflammatory response-stimulating amount of a composition according to claim 2.

46. (New) A method of inhibiting the inflammatory response in a subject which comprises administering an inflammatory response-inhibiting amount of a composition according to claim 3.

47. (New) The method of claim 45, wherein said composition comprises antibody F19A5B1 or a hHBP-binding fragment thereof.

48. (New) The method of claim 46, wherein said composition comprises antibody F19A5B4 or a hHBP-binding fragment thereof.

49. (New) The method of claim 44, wherein the inflammatory response is a response to bacterial infection.

50. (New) The method of claim 49, wherein the infection is a Gram negative bacterial infection.

51. (New) The method of claim 49, wherein the infection is a Gram positive bacterial infection.

52. (New) The method of claim 46, wherein the inflammatory response is associated with sepsis, severe sepsis, sepsis shock and/or disseminated intravascular coagulation.

53. (New). The method of claim 44, wherein the inflammatory response is associated with meningitis.

54. (New). The method of claim 53, wherein the meningitis is meningococcal meningitis.

55. (New) The method according to claim 51, wherein the infection is by *Pneumococcus pneumoniae*.

56. (New) A method for treating individuals having suppressed immune system, cancer, autoimmune diseases and/or trauma comprising administering an effective amount of antibody F19A5B1.

57. (New) A method for treating individuals having a sustained inflammatory response comprising administering an effective amount of antibody F19A5B4.